

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-000602**Date Inspected:** 09-Oct-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 1300**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2330**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Fu Guo Gang	CWI Present:	Yes	No
Inspected CWI report:	Yes No N/A	Rod Oven in Use:	Yes No N/A	
Electrode to specification:	Yes No N/A	Weld Procedures Followed:	Yes No N/A	
Qualified Welders:	Yes No N/A	Verified Joint Fit-up:	Yes No N/A	
Approved Drawings:	Yes No N/A	Approved WPS:	Yes No N/A	
		Delayed / Cancelled:	Yes No N/A	
Bridge No:	34-0006	Component:	77 & 89 Meter Mock-Up	

Summary of Items Observed:

This Quality Assurance (QA) Inspector observed ZPMC welders Zhai Qingshan, welder identification 058026 and Yang Lei, welder identification 040690 welding in the horizontal groove weld position (2G) on the 77 Meter Mock-Up, Skin Plate "D". Connection plates being welded to the longitudinal stiffeners were p596 & p597. The welding procedure specification (WPS) was WPS-B-T-4312-TC-P5-1 with the shield metal arc welding process (SMAW). The voltage being used by the welders was 23.9/24, the amperage 220/210, the preheat and inter-pass temperatures were 181/183 Celsius (C) and the travel speeds were 125/121 millimeters per minute.

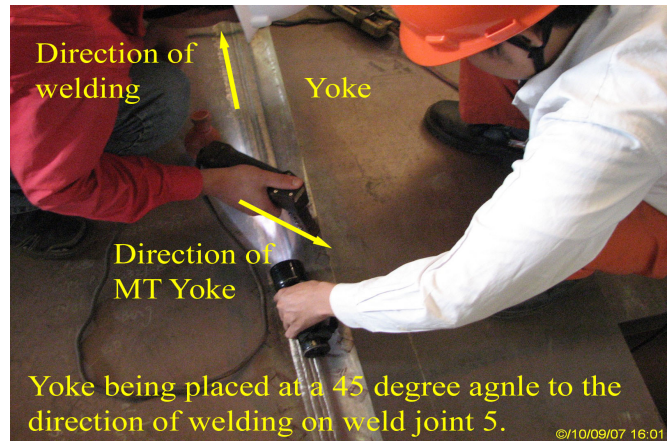
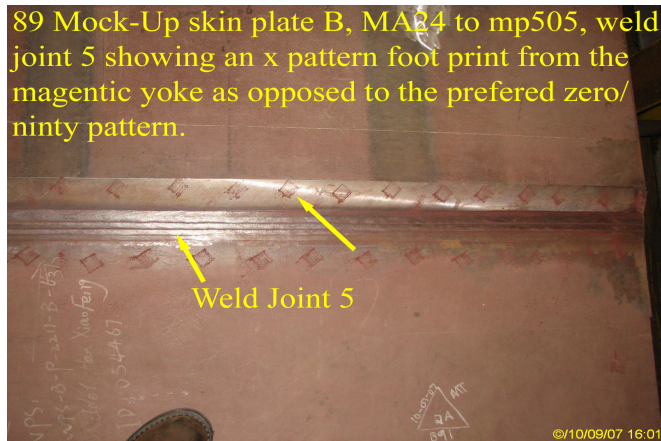
This QA Inspector observed ZPMC Magnetic Particle Testing (MT) Technician, Cai Xinxin testing the cover welds on the 89 Meter Mock-Up, MA24 Skin Plate Sub-Assembly (Face B), partial penetration weld joints 5 & 6 joining MA24-1 to mp505-1. It was noted during the testing that Mr. Cai was placing his MT yoke at 45 degree angles to the direction of welding instead of the conventional zero/ninety degrees. Mr. Cai accepted both weld faces and the four pad eye removal sites on both faces A & B. 10% QA verification MT was conducted, for details see TL-6028 dated October 9, 2007.

This QA Inspector observed ZPMC Magnetic Particle Testing (MT) Technician, Cai Xinxin testing the tack welds on the 89 Meter Mock-Up, MA23 Skin Plate Sub-Assembly (Face C), partial penetration weld joints 37 & 39 joining MA23-1 to mp507-1 and mp308-1. It was noted during QA verification testing that one tack weld was missing from partial penetration weld joint 39. The plate was preheated and this tack weld was re-welded in as it was the one found on first shift which had a crack like indication in it so the whole tack weld was removed. After re-welding of this tack weld it was found by the ZPMC MT Technician Mr. Cai to have a crack like indication once again. 10% QA verification MT was conducted on PJP weld joint 37, for details see TL-6028 dated October

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

9, 2007.



Summary of Conversations:

No significant conversations held today.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By: Berger, Bruce

Quality Assurance Inspector

Reviewed By: Cochran, Jim

QA Reviewer